V. I. Kovalchuk

DIFFRACTIVE INELASTIC SCATTERING OF ^{6}Li NUCLEI BY ^{12}C, ^{28}Si NUCLEI

Method of differential cross sections calculation has been proposed for inelastic diffractive scattering of clustered nuclei by even-even nuclei with excitation of low-lying collective states. The method satisfactorily describes the experimental angular distributions of inelastic scattering cross sections of ^{6}Li nuclei by ^{12}C and ^{28}Si nuclei with the excitation of 2^{+} states (4,44 and 1,78 MeV, respectively).

Keywords: nuclear diffraction, clustered nuclei, inelastic scattering, low-lying collective states.